

PARIETARIA HESPERA (URTICACEAE), A NEW SPECIES OF THE SOUTHWESTERN UNITED STATES

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This species has been known under several names: *P. debilis*, *P. floridana*, *P. debilis* var. *floridana*, and *P. pensylvanica* var. *floridana*. It is, however, sufficiently distinct from our other United States annual species to merit specific rank. For it, the following name is proposed.

PARIETARIA hespera Hinton, sp. nov.

Herba annua prostrata ad erecta, radicibus fibrosis. Folia petiolata; lamina late ovata, reniformis, vel orbiculata, palmatim 3-nervata vel interdum pinnatim nervata, basi truncata, rotundata, cordata, vel obtusa, apice rotundata, retusa, vel abrupte acuminata. Calyx 1.7-3.0 mm longus, lobi acuti ad anguste acuminati vel fere caudati, 0.4-0.7 mm lati, laxe conniventes vel patentibus ad interdum recurvata ad maturitatem. Achenia symmetrice apiculata, 0.75-1.4 mm longa, 0.5-0.85 mm lata, dilute brunnea ad brunnea, hilum interdum protrusum, margine non annulatim incrassatum.

Annual prostrate to erect herb with fibrous roots. Stem simple or sometimes branched at the base, finely or minutely pubescent to hirsute, subterete to terete, faces of the internodes smooth to slightly grooved. Leaf blades broadly ovate, reniform, or orbicular, 5-20 mm long, 4-17 mm wide, widest at about the middle, mostly palmately 3-veined but sometimes pinnately-veined, apex rounded, retuse, or very short acuminate, base truncate, rounded, cordate, or obtuse; upper surface smooth or with sparse fine or minute pubescence. Petiole 3-20 mm long. Involucral bracts conspicuous to nearly obsolete, linear to lanceolate, shorter than the calyx to sometimes longer, 1.0-4.0 mm long, 0.2-1.15 mm wide, pubescent, ciliate on the margins with long stiff hairs and short curled ones. Calyx tubular for one-third to one-half its length, yellowish-brown to dark reddish-brown at maturity, 1.7-3.0 mm long, lobes acute to narrowly acute or almost caudate, 0.4-0.7 mm wide, loosely connivent or spreading and sometimes recurved at maturity. Achene symmetrically apiculate, 0.75-1.4 mm long (usually 1.1 mm), 0.5-0.85 mm wide, light brown to brown, the hilum usually protruding from the body of the achene, not flanged.

HOLOTYPE (US): Arizona. Banks of Rillita. 10 April 1881, C. G. Pringle. **ISOTYPE** (MO). **PARATYPE** (UC): California. Shaded crevices of cliffs. San Bernardino Co. April 1886, Samuel B. Parish.

Range: Ariz., Calif., and S. Nevada.

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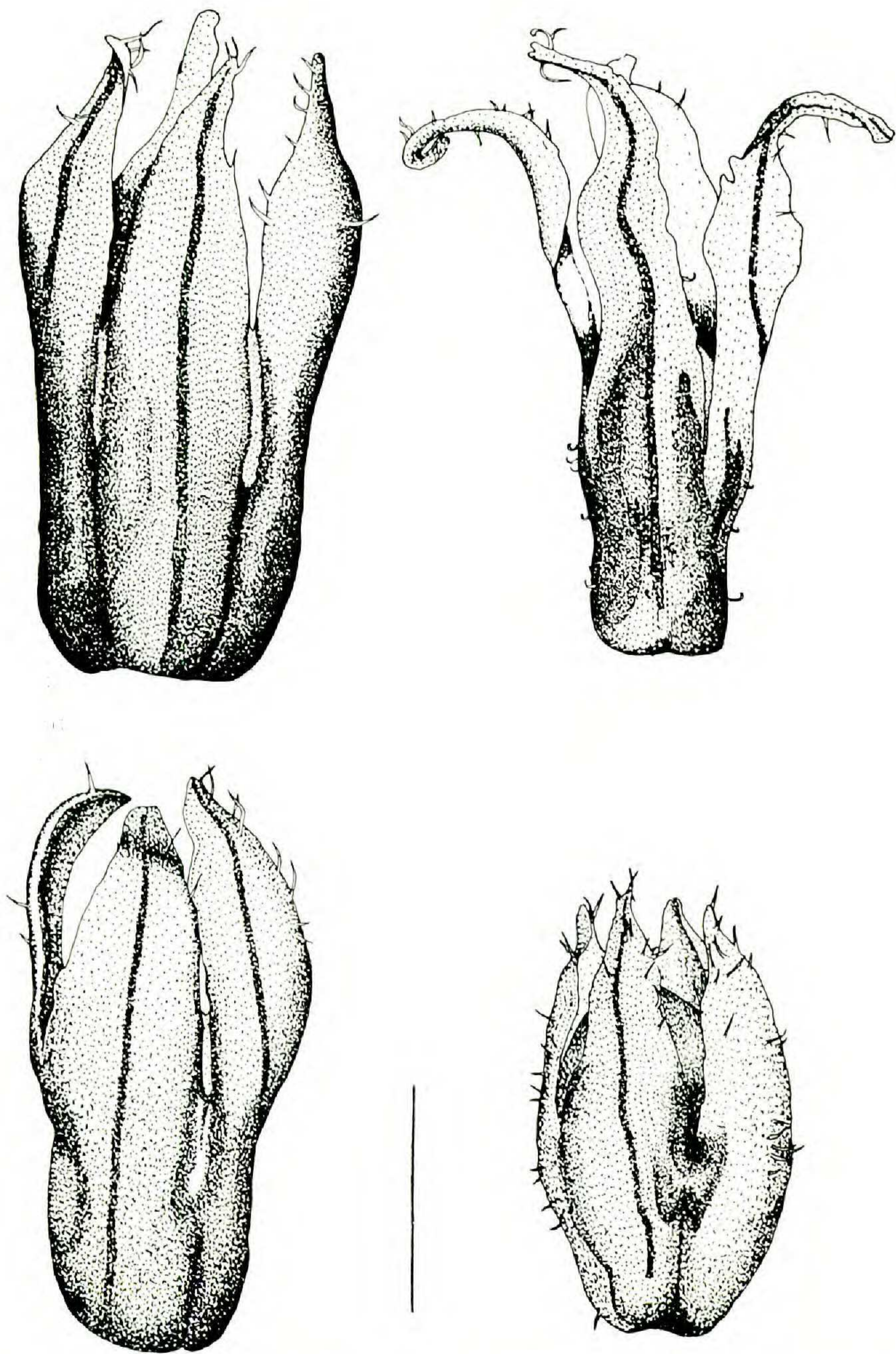


Fig. 1. Calyces in fruit: *P. hespera* var. *hespera* (upper left). *P. hespera* var. *californica* (upper right). *P. pensylvanica* (lower left and right). The line is equal to 1 mm.

Parietaria hespera is a highly polymorphic species. Two varieties may be distinguished, primarily by differences in the calyx, as follows.

Parietaria hespera var. *hespera*.

Lobes of calyx as long as the tube, acute to narrowly acute, loosely connivent, together at maturity, dark reddish-brown.

Range: Ariz., Calif., and S. Nevada.

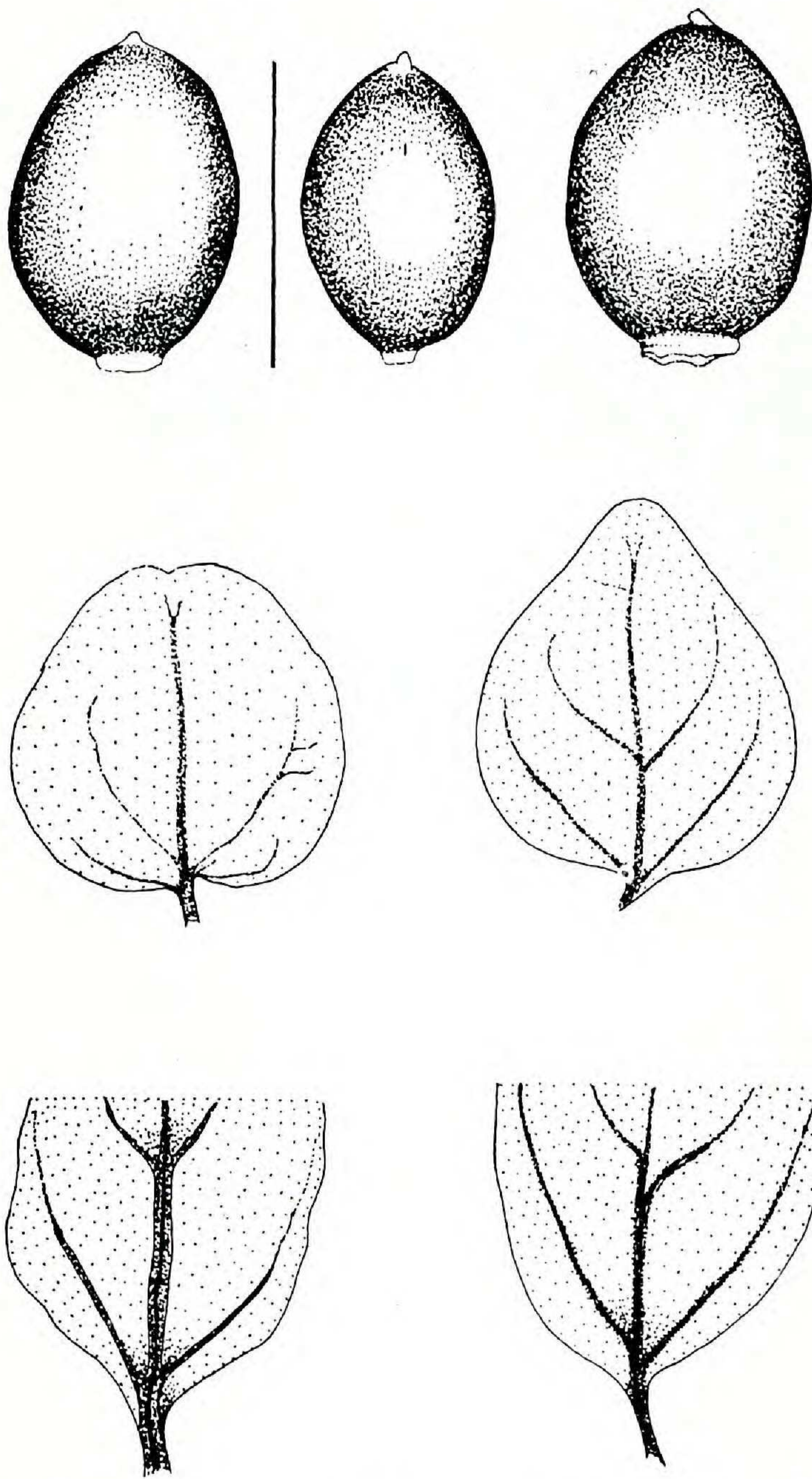


Fig. 2. *Parietaria hespera* var. *hespera*: achene (top left). *P. hespera* var. *californica*: achene (top center). *P. pensylvanica*: achene (top right). *P. hespera*: venation and leaf bases (middle left and right). *P. pensylvanica*: venation and leaf bases (lower left and right). The line is equal to 1 mm.

Parietaria hespera var. **californica** Hinton, var. nov.

A var. *hespera* recedit calycis lobis tubo duplo longioribus, anguste acutis ad fere caudatis, patentibus ad recurvatis.

Lobes of calyx twice as long as the tube, narrowly acute, to almost caudate, spreading and sometimes recurved at maturity, yellowish-brown to

light reddish-brown.

HOLOTYPE (UC): California. Oceano. Under bushes along swamp. Sand hills. 30 April 1910, *I. J. Condit*. PARATYPES, (MIN): California. Los Angeles, Griffith Park. 18 May 1925, *M. Epling*; (US): California, Riverside and vicinity, west side of Box Springs Mts. 29 March 1908, *Fred M. Reed* 2297.

Range: Southern California

Parietaria hespera, sympatric over a large part of its range with western *P. pensylvanica*, is generally readily recognizable therefrom by its leaves, calyx, and achene. In *P. hespera*, venation is typically palmate, i.e., the veins diverge immediately at the base of the blade (see fig. 2). In *P. pensylvanica*, venation is pinnate, i.e., the veins diverge slightly to definitely above the base of the blade (see fig. 2). The leaf base of *P. hespera* is typically round or truncate or sometimes cordate (see fig. 2). However, in a few thin- and membranous-leaved, highly succulent plants of var. *hespera* there may be some pinnately-veined leaves. These leaves are usually more broadly ovate and have more truncate bases than those of typical *P. pensylvanica*. If the plant is *P. hespera*, the pinnately-veined leaves will be found mixed with palmately-veined ones.

The calyx lobes of *P. hespera* are more narrowly acute and, in the membranous-leaved form, have somewhat curled apices while those of *P. pensylvanica* are more broadly acute and are usually not curled. The calyx averages somewhat larger, and the achene somewhat smaller, in *P. hespera* than in *P. pensylvanica*. As a result, the achene of *P. hespera* is more deeply set—more concealed—within the calyx tube (see fig. 1) than the achene of *P. pensylvanica*, in which the combination of smaller calyx and larger achene results in the achene being less deeply set—less concealed—than that of *P. hespera*. In *P. pensylvanica* the achene, indeed, may be well visible between the lobes of the calyx.

The following key is provided for the separation of our western annual *Parietaria*.

Calyx lobes erect to loosely connivent at maturity but not spreading, narrowly acute to acute

Leaves palmately veined or, in some membranous-leaved plants, pinnately veined in part (these plants can usually be distinguished by the light orange-brown calyx). Achene relatively deep set within the calyx (see fig. 1), ellipsoid, brownish. Calyx usually dark reddish-brown, its lobes narrowly acute, sometimes short-recurved at apex. Leaves ovate, broadly ovate, to orbicular, usually less than $1\frac{1}{2}$ times longer than wide, their bases usually rounded or truncate. *P. hespera* var. *hespera*.

Leaves pinnately veined. Achene relatively shallowly set within the calyx (see fig. 1), ovoid, reddish-brown. Calyx dark reddish-brown, its lobes acute, not recurved at apex. Leaves linear-lanceolate, lanceolate, or sometimes ovate, usually 3 or more times longer than wide, their bases acute to obtuse, never truncate. *P. pensylvanica*.

Calyx lobes spreading to sometimes recurved at maturity, long attenuate, almost caudate. Leaves palmately-veined, reniform, broadly-ovate or orbicular, apex rounded or retuse, base cordate or rounded. Achene brown, ovate to broadly ovate. *P. hespera* var. *californica*.

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